

## WHAT IS CLAIMED IS:

1. A parking meter, comprising:
  - i) a microcontroller;
  - ii) a timer coupled with the microcontroller;
  - 5      iii) payment acceptance means coupled with the microcontroller for accepting payment for use of an associated parking space, such that the microcontroller initiates the timer for a prepaid parking interval upon receiving a signal from the payment acceptance means;
  - 10      iv) vehicle detection means coupled with the microcontroller for detecting the presence or absence of a vehicle in the associated parking space;
  - 15      v) means for identifying a vehicle parked in the associated parking space, comprising an interrogation station coupled with the microcontroller, said interrogation station adapted to direct an interrogation signal at the associated parking space in the area of the parking space where the license plate of a parked vehicle is located, receive a reply signal encoded with a vehicle identification code and to decode said signal, the microcontroller initiating the interrogation station to direct an interrogation signal at the associated parking space in the area of the parking space where the license plate of a parked vehicle is located upon  
20      determining the existence of a parking violation; and  
25      vi) digital storage means for storing said decoded vehicle identification code.
2. The parking meter of claim 1 further comprising:
  - vii) telecommunications means coupled with said microcontroller, the microcontroller initiating a call notifying a remote monitoring station

upon determining the existence of a parking violation and communicating said vehicle identification code.

3. The parking meter of claim 2 wherein said telecommunications means is adapted to transmit said vehicle identification code to said  
5 authorities.

4. The parking meter of claim 1 wherein said microcontroller comprises a microprocessor.

5. The parking meter as defined in claim 1 wherein said vehicle detection means further comprises a digital camera which detects the  
10 presence of a vehicle.

6. The parking meter as defined in claim 1 wherein said vehicle detection means comprises an ultrasonic, radar or infrared detector.

7. The parking meter as defined in claim 2 wherein said telecommunications means comprises a modem.

8. The parking meter as defined in claim 1, wherein the micro-  
15 controller initiates the timer for a predetermined standby interval upon receiving a signal from the vehicle detection means that a vehicle is present in the associated parking space, wherein said microcontroller is adapted to terminate the timing of the standby interval upon receiving a  
20 signal from the payment acceptance means, and said microcontroller initiates the interrogation station to direct an interrogation signal at the associated parking space in the area of the parking space where the license plate of a parked vehicle is located after expiry of said standby interval without receiving a signal from said payment acceptance means  
25 that a payment has been made.

9. The parking meter as defined in claim 2, wherein the micro-  
controller initiates the timer for a predetermined standby interval upon

09857007 101701  
T0707 20075860

receiving a signal from the vehicle detection means that a vehicle is present in the associated parking space, the microcontroller is adapted to terminate the timing of the standby interval upon receiving a signal from the payment acceptance means, and the microcontroller initiates a call to  
5 said remote monitoring station as to a parking violation after the expiration of the standby interval without receiving a signal from said payment acceptance means that a payment has been made.

10 10. The parking meter as defined in claim 1, wherein the microcontroller determines the existence of a parking violation upon the vehicle detection means signalling to the microcontroller the presence of a vehicle in the associated parking space after expiry of said prepaid parking interval.

15 11. The parking meter as defined in claim 2, wherein the microcontroller determines the existence of a parking violation upon the vehicle detection means signalling to the microcontroller the presence of a vehicle in the associated parking space after expiry of said prepaid parking interval.

20 12. A parking meter, comprising:  
i) a microcontroller;  
ii) a timer coupled with the microcontroller;  
iii) payment acceptance means coupled with the microcontroller for accepting payment for use of an associated parking space, such that the microcontroller initiates the timer for a prepaid parking interval upon receiving a signal from the payment acceptance means;  
25 iv) vehicle detection means coupled with said microcontroller for detecting the presence or absence of a vehicle in the associated parking space comprising an in-pavement magnetic field sensor adapted to

09357007-101701

transmit a signal to said microcontroller upon detection of a vehicle in said associated parking space;

v) means for identifying a vehicle parked in the associated parking space.

09857007-101701  
T04TOT 40045860